derive anything from that?

A Sure. So, again, Golf and Versus are affiliated. And they are there. So they are fully owned by Comcast. And not only did they skip the intermediate tier, but they got put on the best tier.

And remember what the Commission's findings was in the NBCU order, which is that Comcast treats Golf and Versus more favorably than any other MVPD -- okay? -- and when controlling for same geographic areas and all other things they could explain in their carriage.

So Golf and Versus are getting very good treatment. Indeed, they are getting discriminated in favor of according to the FCC.

Finally, you see ESPN again as the counter-example, if you will. But, again, it's the same story. I mean, ESPN is a special animal. And it bucks the general trend that I am observing in the data.

Q Without giving numbers, Dr.

Singer, could you give us a sense, for

example, of the difference in the amount, just

as a mathematical exercise, the difference in

the amount of subscriber fees charged by ESPN

versus, say, Golf, Versus, or even the Tennis

Channel?

A Well, it's been a bit since I have seen the exact number that ESPN charges, but I know that it is among the most expensive programming that's available for MVPDs. It's a month or something on that order. It's very expensive.

And the networks that we're talking about here, at least Tennis Channel is in my mind. I'm just going to speak to the publicly available data, states that the average revenue per month is on the order of 15 cents in 2009.

MR. PHILLIPS: I'd like to, Your Honor, approach, if I could, and hand out yet one more exhibit that is essentially the same

Page 850 chart with just a slightly different format, 1 as I will walk through. 2 3 JUDGE SIPPEL: Is this also 4 already in evidence in a different format? 5 MR. PHILLIPS: The one I gave you 6 before, Your Honor, is in evidence because 7 it's in his report. This one is not, although 8 it is exactly the same data, just slightly different format. 9 10 JUDGE SIPPEL: Okay. this has been marked as Tennis Channel exhibit 191. 11 12 (Whereupon, the aforementioned 13 document was marked for identification as Tennis Channel 14 15 Exhibit Number 191.) BY MR. PHILLIPS: 16 17 Now, Dr. Singer, have you seen 18 this chart, exhibit 191, before? 19 I have. Α 20 And can you explain to me what 21 this chart purports to show? 22 Well, I think it's the same Α

information that's on table 1 in my report.

It just removes all of the networks that do

not have an affiliation with Comcast.

Q So these are only the Comcast, the networks that Comcast, has ownership of, either fully or partially, correct?

A Correct.

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Q And in the sports entertainment tier, how many are there?

A There are none.

Q Now, Dr. Singer, isn't it possible that the quality of the network explains why networks Golf and Versus, for example, end up on the digital preferred or digital starter tiers?

A Well, that is certainly what

Comcast would have you believe. And it's

certainly -- as a theoretical matter, it's a

viable proposition.

And, just to kind of restate it in layman's terms, they would say, "Look, it has nothing to do with affiliation. It just so

happens that all the ones that are affiliated get good treatment and the ones that are unaffiliated get bad treatment."

But also what is really going on is that it is higher quality. It is higher quality of these that are on the affiliated -- that have made it through the other side of the fence, that have gotten out of the doghouse.

And that is a very difficult proposition to rebut unless we have a natural experiment. And, fortunately, we do have a natural experiment. Economists like to put fancy words on things. We call these fixed effects models. But in English, the idea is that if someone's attributes changed over the course of time, we can see if the conduct that was taken with respect to those entities changed. And then we can be sure that it has nothing to do with the underlying or unobservable characteristics of the candidate. But, instead, it's the treatment variable.

So let me now say that in English.

Okay? We have two very nice natural experiments here, which is Major League
Baseball Network and NHL, the National Hockey
Network. Okay? What is so beautiful about
these experiments is that we had a period of
time in which these two networks were not

affiliated with Comcast. All right? And we got to see how Comcast treated them when they

10 were not affiliated.

And then we had a period of time in which they were affiliated with Comcast, and we got to see how Comcast treated them after they were affiliated.

The NHL Network is the easier story to explain. They literally were on the sports tier when they were an independent network. And as soon as Comcast got equity in the network, their behavior towards NHL, towards National Hockey League Network, changed. Okay? And they put them into the digital preferred tier.

1 And now when Comcast starts to

say, you know, "It's the quality. It's the

3 innate quality of the network that's driving

our decisions," you have to ask yourself, 4

5 wasn't the quality the same? And if it was

the same, then quality can't be driving the 6

7 decision. It's got to be whether or not you

submit to their equity demands. 8

> Now, the next one that's a little -- well, it's less clean, but it's still I

11 think a very compelling story is the Major

12 League Baseball Network. There we don't get

13 to see a switch in -- we do get to see a

14 switch in affiliation. Okay? That's the good

15 We get to see a period in which they

16 did not, in which Comcast did not, have any

17 equity in them. And then we have an after

18 period in which Comcast did have equity in

19 them.

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20 But we don't get to see a movement

21 across tiers -- okay? -- as we did for the

22 But we had something pretty darn close, NHL.

which is that Major League Baseball was complaining vigorously in the public that it couldn't get carriage better than sports entertainment. That is, Comcast was only willing to launch it on sports entertainment unless it granted equity. And, sure enough, as soon as it granted equity in Comcast, Comcast launched it on the digital preferred tier.

And so, in sum, I think those are very nice what I call natural experiments that allow the economist to really dig deep and understand what is it that is driving Comcast carriage decisions.

Q Dr. Singer, if I may, I want to switch focus just a little bit with you for a moment and take you back to something you referred to a few minutes ago, the technical appendix to the FCC report, which probably requires a Ph.D. understand. And I want to ask you if you are familiar with it and could break it down for us.

A It is difficult to penetrate. And this will certainly be a test of my communications skills, but I will give it a whirl. What --

JUDGE SIPPEL: Only compared to my ability to listen, too.

THE WITNESS: Well, just please -I had to read it about four times. So please
stop me if anything becomes unclear. But the
FCC borrowed a test from a professor at the
University of Chicago named Austan Goolsbee,
who now happens to be the chief economist at
the Council of Economic Advisers for President
Obama.

And Dr. Goolsbee came up with a neat insight, which is, how can you test whether or not -- what is causing a vertically integrated MVPD like Comcast. What is causing them to give preference to their own channels? Are they doing it for efficiency reasons? Are they doing it for anti-competitive reasons?

And this was his very interesting

insight and probably why he's the head of the Council of Economic Advisers. He said we could take advantage of the extent to which they are giving favoritism to their own networks to determine what is driving the decision-making. That is, when we look out -and this is what the FCC found, the first finding, which is that when we look out and we see how Comcast treats Golf and Versus, it is carrying those networks more broadly than the relevant comparators. That is, they're in-region rivals controlling for all of the things that, other things that, could explain why they are carrying them the way that they do.

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Well, that Dr. Goolsbee figured out is if the extent of the favoritism varies, -- okay? -- that is, if we see more favoritism in some markets and less favoritism in other markets and if that variation can be explained by Comcast market share, right, then depending upon the relationship between the favoritism

and the Comcast market share, we can make a determination as to whether Comcast is doing this for pro-competitive reasons or anti-competitive reasons.

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And here is the insight. And here is what the FCC found. The insight is that there are costs to discriminating. Comcast wants to incur those costs, it would make sense to do and if it is doing it for efficiency reasons, it would make sense to pull those networks down to a more broadly distributed tier so that more people could see them in markets where it is facing more competition. That is, to meet the competition, if Comcast is doing this for the right reason, we should seem them pulling Golf and Versus down to the very most penetrated tiers to really combat the competition that they are facing from DirecTV, Dish, and either AT&T or Verizon.

But if we see them pulling it down to the broadest tiers in markets where they

face less competition, then they must be doing it for anti-competitive reasons. Okay? This is the key insight. And it took me four times to read. And I'm happy to go back through that again. But basically what the FCC found is they were able to confirm that not only — this is the easy part.

Not only was Comcast giving

preferential treatment to Golf and Tennis

vis-a-vis its MVPD rivals -- okay? -- but it

tended to carry them more broadly in markets

where it faced less competition. Therefore,

they concluded that they must be doing it,

Comcast must be doing this, for

anti-competitive reasons.

I'm going to stop talking and let you ask the next question.

MR. PHILLIPS: I will try.

BY MR. PHILLIPS:

Q Did you take that analysis that Professor Goolsbee had done and try to apply it in any way in this case?

A I did. What I tried to figure out is what would be the analogue for an unaffiliated or independent network. Right?

So what I wanted to see was in most of the cases; in fact, in percent of the cases,

Comcast carries the Tennis Channel on its sports tier, but, for some reason, in roughly percent of its markets, it moves Tennis

Channel off the sports tier and puts it on a better tier.

And I wanted to see if that

decision to basically deviate from the norm,

right -- I'll just repeat again in percent

of the cases, Tennis Channel is carried by

Comcast on its sports tier. In percent of

the markets, for some reason, Comcast pulls it

off.

What I wanted to see was when they
pull it off and put it on a more broadly
distributed tier, are they doing it to meet
the competition? And it turned out that
Comcast share, which is a proxy for how much

competition they were facing, seemed to explain again Comcast decision-making here.

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And so this is very complicated, but to put a big bow around this whole thing, what I am observing and consistent with what the FCC is observing is that competition is the elixir that solves all of these problems of vertical integration. If only we had -- I mean, one solution to this entire morass that we're in right now would just be an injection of downstream competition.

What happens is when Comcast gets exposed to competition, it doesn't give as much preference to its own. Okay? And it doesn't give as worse treatment to the independents. All right? That's what we're finding in a nutshell.

Q And how did you come to that conclusion?

A Well, exactly what I told you,
that it's -- when you look -- when you compare
the percent of markets that -- in which

they carry Tennis on the sports tier to the percent of markets that they don't, you see that there's a difference of about percentage points in Comcast's market share.

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Q Are those percentage points materially significant to you?

A Well, I mean, it seems material in an economic sense in that it's not

. You

10 know, seems

-- you know, economists use kind of as a rule
of thumb percent as some measure of
significance.

But economic significance is different from statistical significance.

Economic significance turns on the judgment of

the researchers, does this seem material --

18 okay? -- in an economic sense?

But it also turned out that it was statistically significant in the sense that I compared in a statistical test the average of Comcast's market share in the markets where it

carries Tennis Channel on the sports tier to Comcast's average market share in the markets in which Comcast carries Tennis on a better tier.

And that difference, that percentage point difference, was statistically significant.

Q Now, were the findings that you had on this particular analysis consistent with the findings that you had made in the rest of the opinions?

A Yes. Everything that I -- yes, it is. And we're going to probably go through more evidence, but it is all consistent. This is all kind of building a case or kind of causing me to give greater credence to the -- what I call the anti-competitive hypothesis, which is that Comcast is not only treating Tennis Channel worse than its affiliated networks, but it's doing it for the wrong reasons.

Q As part of that anti-competitive

Q I'm sorry, Dr. Singer. But what networks were you comparing?

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A Oh, I didn't get that from the question. I'm sorry.

1 Q That's fine.

A I was comparing Tennis Channel to Comcast's wholly owned national sports networks of Versus and Golf.

Q And what did you look at to try to determine whether they were similarly situated?

A Right. So, again, what I wanted to try to determine was, are these three networks similarly situated from the perspective of the various constituencies that matter in this market? And the constituencies that matter are viewers, advertisers, and MVPDs -- sorry -- rights holders.

Let me say there are four constituencies here and three of whom I analyzed in the similarly situated section.

And let me just go back for the record to be clear: viewers, advertisers, and the rights holders.

Q And with respect to viewers, what did you find?

A I found that viewers perceive the content on these networks to be similarly situated. In fact, the viewers themselves are similarly situated, are similar based on the evidence that we have seen here.

You know, we have heard testimony today that puts them in the same age bracket that suggests that they are more affluent than the average American family, that they tend to skew slightly -- well, they all tend to skew male, some of them more than others.

I think the viewers had other
things in common, too. They participated in
the sports that they were watching. I thought
that was very important. There's a Simmons
survey that shows what percentage of Tennis
Channel viewers participate in golf and in
tennis and what percentage of Golf Channel
viewers participate in tennis and in golf.
And the numbers didn't surprise me. It was
exactly what I would expect.

The judge made an interesting

observation about his days as a caddy I think on Monday, which is that he remembers these sports basically being played next to each other. And that was the exact impression that I had when I came to the case, that, boy, you know, if you think about serving up and of leisure sports, what sports constitute the leisure sports?

An important thing is that Comcast has its own classification system in its 10-K for these two networks. And I think this is very important. They use the words "sports and "leisure networks." That's Comcast's own words. That's how they describe Golf and Versus.

And I can't think of a better way to describe Tennis Channel. These are leisure sports. You are aiming at a particular demographic, an affluent, kind of upper class demographic that has the luxury of consuming leisure. And it was just kind of clear to me that the viewers are very close here.

Q What about advertisers? What did you find with respect to advertisers?

just trying to hit those viewers. So the extent that the viewers are similar means that the advertisers perceive, you know, the viewers on these various networks to be close. We heard testimony today that advertisers have a sports budget. And there's a fight for share of that budget.

And what's neat about sports that we heard is that you get to hit a demographic that is different from the generic demographic that you hit when you otherwise advertise on television. You have more males. You have a lot of money. And people in those categories tend to spend a lot of money on your wares.

Q What about the chart that we showed earlier that shows that there are actually -- overlapping advertisers not only belong in the sports networks but a huge number of them.

A Oh, right. Well, just to orient, so my interpretation of that evidence is that Tennis Channel might be competing with lots of networks besides Golf and Versus. I don't know if there's any requirement here that Tennis Channel must only compete with Golf and Versus. It is conceivable that they are stealing share from ESPN or even news network or other networks.

But the overlap that I looked at, which is saying that the overlap that was sponsored by Mr. Herman, I believe, I thought that evidence was certainly consistent with the notion that the advertisers themselves are similar.

Q And did you draw any conclusions about programming overlap?

A I did. And this is the stuff
that, frankly, I couldn't know or have any
feel for until I kind of really got into the
case, but I always had the impression that
golf and tennis were going to be the ones that

were clearly similarly situated.

And I was always saying, how are we going to demonstrate? How could this be Versus, right, as Mr. Carroll described Versus yesterday? He called it the vicious or the -- I can't remember -- vicious or violent channel, although, as an aside, the Tour de France and cycling isn't necessarily all that violent but --

JUDGE SIPPEL: It is more blue collar, I guess you would say.

THE WITNESS: Some of the sports are more blue collar. That is precisely right, the cage fighting, which I'll just leave it at that. But, in contrast, the cycling is not.

But here is what really opened my eyes on this notion of similarly situated.

JUDGE SIPPEL: Rodeo riding, too, by the way. Is that what they call it: rodeo riding?

THE WITNESS: Bull riding?

1 JUDGE SIPPEL: Bull riding.

THE WITNESS: Yes.

JUDGE SIPPEL: That's on there,

4 too, isn't it?

THE WITNESS: Yes, very violent.

What really impressed me and really kind of nailed the inquiry on similarly situated was, just as in the NFL case, where Versus and NFL were competing for the same content, NFL Thursday night football games, we have documentary evidence here and admissions by Comcast finally that Versus is competing for the same tennis programming as the Tennis Channel.

To me, that is dispositive. I certainly want to look at other evidence and make sure that we can check the boxes on the other constituencies. But let me just roll through the evidence on that.

We know that Versus aired World

Team Tennis as recently as 2008. We know that

Versus competed against, directly competed

economist as to what I said. That's true.

When I caddied, there was a big country club

up on the hill. And on one side will be the

tennis courts. And then the first tee was on

the other side. And I was on the other side,

of course, with the caddying.

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And there were two types of people that would play on the golf course: the people from the country club, people that were staying in a very fine hotel by the lake; and then there were the regulars from downtown.

Maybe you want to call them townies for nothing better.

And it was an entirely different class. I mean, they were the good golfers.

They were regular golfers. But they talked a different language. I mean, I learned as a young man how to make adjectives into verbs and things like that, you know.

(Laughter.)

JUDGE SIPPEL: So there is some -that is only my experience, but there are some

Page 874 1 differences. 2 THE WITNESS: Let me just make --3 can I just make --JUDGE SIPPEL: Of course, I can't 4 5 speak for that same distinction with tennis. I don't think it's going to be --6 7 THE WITNESS: Can I make a 8 clarifying comment? JUDGE SIPPEL: Yes, I think make 9 10 11 THE WITNESS: Well, let me just 12 I did not mean to suggest that say this. 13 every viewer of golf has a certain income and 14 every viewer of tennis has -- or participant in tennis has a certain income. 15 16 But what we do know is that their 17 average income is very close to each other 18 according to two different surveys that were 19

computed, that were performed in this proceeding. We have a -- I'm going to --

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Mendelson and MRI I think are the two sources,

but, in any event, there are outfits that go out and get income for Tennis Channel viewers and for Golf viewers and then take averages and compare them. And we actually get to see.

In the Mendelson survey, this is

-- I'm -- I know that I cited the MRI, but

Mendelson I just read in Mr. Brooks'

testimony. I think the numbers were 140,000

of it each for Tennis Channel and for Golf.

It's high.

Now, of course, that survey is skewed slightly upward because they only interview people with income over 100,000 -- okay? -- because it's their survey of affluent homes.

But in another survey, MRI, I think the incomes were in the mid '80s.

JUDGE SIPPEL: Well, I mean, I would think that there is only a small percentage of people in the overall country that make that kind of money, surprisingly.

Am I right?